IN THE UNITED STATES DISTRICT COURT

FOR THE DISTRICT OF DELAWARE

AUTONOMOUS DEVICES LLC,	)	
	)	
Plaintiff,	)	
	)	
v.	)	C.A. No. 22-1466-MN
	)	
TESLA, INC.,	)	
	)	
Defendant.	)	

**PLAINTIFF AUTONOMOUS DEVICES LLC'S RESPONSE TO DEFENDANT
TESLA, INC.'S OPENING BRIEF IN SUPPORT OF THEIR
<u>MOTION TO DISMISS UNDER RULE 12(b)(6)</u>**

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I.   STAGE AND NATURE OF PROCEEDINGS

Plaintiff Autonomous Devices LLC ("Plaintiff" or "Autonomous Devices") files this Response to Tesla, Inc.'s ("Defendant" or "Tesla") Fed. R. Civ. P. 12(b)(6) Motion to Dismiss ("Motion" or "Mot.") (D.I. 12). For the following reasons, the Court should deny Tesla's Motion and find the claims of the Asserted Patents[1] are directed to patent eligible subject matter.

II.   SUMMARY OF THE ARGUMENT

Tesla's Motion to Dismiss should be denied for several independent reasons. *First*, Tesla has failed to provide any meaningful analysis to support conflating *one hundred thirty-four* claims across the *six* Asserted Patents into *two* representative claims. There is no agreement on representativeness, and the claims have substantial differences. This failure alone provides a sufficient basis for this Court to deny the motion. *Second*, Tesla's *Alice* step-one arguments rely on characterizing Autonomous Devices' patents at an extremely high level of abstraction that is divorced from the claim language—exactly what the Supreme Court and the Federal Circuit instruct against. This, too, alone is a basis to deny the motion. *Third*, the resolution of Section 101 eligibility of the patent claims would be inappropriate at this early stage of the proceedings without the benefit of claim construction and other discovery. *Fourth,* while the Court need not reach step two of the eligibility test, Tesla's arguments there fail as well because they amount only to unsubstantiated attorney arguments, which, at most, suggest factual and claim-construction disputes. *Finally*, Tesla ignores Autonomous Devices' well-pleaded allegations that its patent claims recite unconventional improvements to computer technology. Federal Circuit precedent instructs that such allegations preclude dismissal. Tesla's premature Motion must thus be denied.

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[1] U.S. Patent Nos. 10,102,449 (the "'449 Patent"); 11,055,583 (the "'583 Patent"); 10,452,974 (the "'974 Patent"); 11,238,344 (the "'344 Patent"); 10,607,134 (the "'134 Patent"); and 11,113,585 (the "'585 Patent") (collectively the "Asserted Patents").

III.   STATEMENT OF FACTS

There are six Asserted Patents with one hundred thirty-four claims, including eighteen independent claims and one hundred sixteen dependent claims with additional claim elements. Autonomous Devices has not elected to pursue only the claims identified in the Complaint, and the parties have not come to an agreement regarding representative claims. Rather, as noted in the Complaint, the cited claims are only exemplary, *see* Compl. (D.I. 1) at ¶¶96, 102, 109, 116, 122, 129, and Tesla's infringement encompasses many other claims, which Autonomous Devices will identify through infringement contentions at the appropriate time. Even so, Tesla contends that all one hundred thirty-four claims—both independent and dependent—are represented by two claims, and the case should be dismissed now in its entirety. *See* Mot. at 5-8.

IV.   LEGAL STANDARD

Dismissal at the pleading stage is improper if a complaint alleges "enough facts to state a claim to relief that is plausible on its face." *Bell Atlantic Corp. v. Twombly*, 550 U.S. 544, 570 (2007). "Evaluating a motion to dismiss under Federal Rule of Civil Procedure 12(b)(6) requires the Court to accept as true all material allegations of the complaint." *Pac. Biosciences of Cal., Inc. v. Oxford Nanopore Techs., Inc.*, C.A. No. 17-1353-LPS, 2018 WL 1419082, at *3 (D. Del. Mar. 22, 2018) (citation omitted). Whether a patent recites patent eligible subject matter under Section 101 involves a two-step analysis under *Alice Corp. Pty. Ltd. v. CLS Bank Int'l*, 573 U.S. 208 (2014). "[W]hether a claim recites patent eligible subject matter is a question of law which may contain underlying facts." *Berkheimer v. HP Inc.*, 881 F.3d 1360, 1368 (Fed. Cir. 2018). "Any fact . . . pertinent to the invalidity conclusion must be proven by clear and convincing evidence." *Id.*

A.   *Alice* Step One

Alice step one involves determining "whether the claims at issue are directed to a patent-ineligible concept," like an abstract idea. *Alice*, 573 U.S. at 218. The Supreme Court warned

against over-classifying claims as abstract, urging courts to "tread carefully in construing this exclusionary principle lest it swallow all of patent law." *Id.* at 217. It recognized that "at some level, all inventions. . . embody, use, reflect, rest upon, or apply laws of nature, natural phenomena, or abstract ideas" and instructed that "an invention is not rendered ineligible for patent simply because it involves an abstract concept." *Id.* (citations omitted).

In determining whether a claim is directed to an abstract idea, courts should avoid over-generalization and must take into account the specific limitations of the claims. *See McRO, Inc. v. Bandai Namco Games Am. Inc.*, 837 F.3d 1299, 1313 (Fed. Cir. 2016). "[D]escribing the claims at [] a high level of abstraction and untethered from the language of the claims all but ensures that the exceptions to § 101 swallow the rule." *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1337 (Fed. Cir. 2016).

B.   *Alice* Step Two

If a claim is held to be directed to an abstract idea at step one, then the Court proceeds to step two, which involves determining "whether the claimed elements—individually and as an ordered combination—recite an inventive concept." *Cellspin Soft, Inc. v. Fitbit, Inc.*, 927 F.3d 1306, 1316 (Fed. Cir. 2019) (citations omitted). "An inventive concept reflects something more than the application of an abstract idea using well-understood, routine, and conventional activities previously known to the industry." *Id.* Claims reciting well-known technologies are still eligible if they result in a "non-conventional and non-generic arrangement of known, conventional pieces." *Bascom Glob. Internet Servs., Inc. v. AT&T Mobility LLC*, 827 F.3d 1341, 1350 (Fed. Cir. 2016).

The step two inquiry is a question of fact that cannot be decided on a motion to dismiss where the plaintiff has plausibly alleged that the claimed invention was not well-understood, routine or conventional. "Whether the claim elements or the claimed combination are well-understood, routine, [or] conventional is a question of fact." *Aatrix Software, Inc. v. Green Shades*

Software, Inc., 882 F.3d 1121, 1128 (Fed. Cir. 2018). Well-plead allegations in the complaint that individual elements and the claimed combination are not well-understood, routine, or conventional activity must be accepted as true at the motion to dismiss stage, and the motion must be denied. *See Cellspin*, 927 F.3d at 1317-19.

V.   ARGUMENT

Tesla's arguments improperly oversimplify the claim language, discount the improvements over the prior art described in the specifications and the claims, and ignore numerous distinct elements by declaring two claims "representative" of all claims across six patents. Not only do Tesla's conclusory arguments facially fail, but the factual allegations in the Complaint, the expert declaration of Dr. Saber, and the patent disclosures,[2] which must be taken as true at the motion to dismiss stage, confirm that the Asserted Patents are directed to non-abstract, concrete improvements to the specific technological problems arising in artificial intelligence, autonomous devices, and/or simulation systems and claim unconventional, inventive concepts. At the very least, fact and claim construction issues remain that cannot be resolved on a motion to dismiss. Tesla's Motion, thus, should be denied.

A.   Tesla's Two "Representative Claims" Are Not Representative of the One Hundred Thirty-Four Claims in the Asserted Patents

Tesla argues that the six Asserted Patents should be held invalid and the entire case dismissed based on a bare and unsupported allegation that two patent claims are representative of all patent claims in six patents. Tesla's conclusory arguments do not meet the burden to show that claim 1 of the '449 Patent and claim 1 of the '585 Patent represent all ***one hundred thirty-four*** claims in the Asserted Patents. A section 101 motion to dismiss fails where, as here, there is no

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[2] Contrary to Tesla's conclusory assertion (*see* Mot. at n.1), there is no "substantial overlap" between the specifications of all six Asserted Patents. As discussed *infra*, differences that are highly relevant to the eligibility issues exist.

agreement on representativeness, and the movant does not provide a meaningful analysis for each of the challenged claims. *See, e.g.*, *Cronos Techs. v. Expedia, Inc.*, C.A. No. 13-1538-LPS, 2015 WL 5234040, at *2-3 (D. Del. Sept. 8, 2015).

Tesla's misguided argument first attempts to break the six patents into two groups by mischaracterized operation: (1) Autonomous <u>Device</u> Patents and (2) Autonomous <u>Application</u> Patents.[3] Mot. at 2-3. And, although Tesla purports to analyze a representative claim for each group (ignoring one hundred thirty-two other claims), in reality, Tesla further reduces its analysis down to a *single* claim representing *all* six patents. Indeed, Tesla glosses over the differences between the two professed representative claims and proceeds to apply the same analysis to *all* patent claims:

> The primary difference in the Autonomous Application Patent claims is that they recite automating a digital object or avatar instead of a physical device. This difference, however, does not change the fact that the claims are directed to the abstract idea of learning to perform a task . . . Accordingly, the analysis in the Section IV.B.1, supra, regarding limitations 1, 2, 3, and 4 of the Autonomous Device Patents ***applies equally to the Autonomous Application Patents***.

Mot. at 15-16 (emphasis supplied). Tesla's entire analysis, therefore, focuses solely on ***four claim elements*** that it asserts are representative of all ***one hundred thirty-four*** claims across the six Asserted Patents.

This truncated analysis not only disregards distinct elements in the alleged representative claims but also ignores numerous distinct claim elements across the six patents. Indeed, Tesla fails to address the vast majority of the claims in the Asserted Patents and the diverse elements describing specific improvements over existing technology. For example, certain claims require a

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[3] In addition to not agreeing with Tesla's arguments regarding representativeness, Autonomous Devices does not agree with Tesla's grouping of the Asserted Patents. *See infra* (discussing three groups of patents: (1) the Object Representation Patents, (2) the Digital Picture Patents, and (3) the Autonomous Vehicle Simulation Patents).

"second device to autonomously perform" operations using "instruction sets for operating the first device" that are "learned" by "operating the first device at least partially by a user." *See* '344 Patent at claims 1, 5; *see also* '974 Patent at claims 1, 18; '583 Patent at claims 13, 14; '449 Patent at claims 4, 6, 9, 14, 18; '134 Patent at claim 5. As Dr. Saber explained in his declaration, which was submitted with the Complaint, as of the priority date of the '344, '974, '449, and '583 Patents, "the execution of an instruction set on one vehicle where that instruction set was learned on another vehicle was inventive and novel, and this feature was not well-understood, routine, or conventional." D.I. 1-7 (Saber Decl.) at ¶52; *see also id.* at ¶45. These claimed fleet learning capabilities overlooked by Tesla "unlocked the next level of autonomous driving because they allowed an entire fleet to train the system providing a higher degree to diversity in the training process." *Id.* at ¶47; *see also id.* at ¶56. Similarly, Tesla's faulty abstraction overlooks the claimed concepts of a "neural network" ('344 Patent at claim 15; '585 Patent at claim 16; '583 Patent at claim 22) and a "knowledgebase" or "knowledge structure" that includes "knowledge cells" having specifically claimed types of correlations ('974 Patent at claim 1, 2; '449 Patent at claims 12, 16, 20; '134 Patent at claim 9). As Dr. Saber explained, these concepts are an important leap over "pre-coded" responses. Saber Decl. at ¶36.

None of these inventive elements are found in Tesla's "representative" claims. Critically, the unaddressed claims include significant differences that prevent any one claim from being representative. Indeed, the Asserted Patents' one hundred sixteen dependent claims have presumptive meaning, which Tesla simply ignores. *See Berkheimer*, 881 F.3d at 1365-66 ("A claim is not representative simply because it is an independent claim."). Tesla's "analysis" falls well short of the meaningful analysis required to invalidate every single claim in Autonomous Devices' six patents and dooms its motion from the outset. *See* Ex. 1 (*Diogenes Limited et al. v. DraftKings*

Inc., C.A. No. 21-01695-MN, D.I. 55 at 6-7 (D. Del. Aug. 26, 2022) ("Although the Federal Circuit has made clear that courts may treat a claim as representative in certain situations, those situations do not extend to the one here – where Defendant offers arguments that are conclusory and unexplained at best and Plaintiff . . . offered meaningful argument as to the distinctive differences between claims.") (internal citations omitted)).

Autonomous Devices has offered meaningful analysis showing why the distinct differences in other claims defeat Tesla's two-claim "representativeness" argument. Moreover, this Court has correctly observed that it is not an efficient use of judicial resources to determine eligibility of numerous claims across several patents at the motion to dismiss stage absent an agreement on representativeness. *See* Ex. 2 (*DigiMedia Tech, LLC, v. Lenovo, Inc. et al.,* C.A. No. 21-227-MN, D.I. 44 at 1-2 (D. Del. Feb. 8, 2022)); Ex. 3 (*Neustar, Inc. et al. v. Prove, Inc. et al.*, C.A. No. 20-1633-MN, D.I. 24 at 1-2 (D. Del. Apr. 29, 2021)); Ex. 4 (*Alterwan, Inc. v. Amazon.com, Inc.*, C.A. No. 19-1544-MN, D.I. 51 at 1-2 (D. Del. July 20, 2020)). The same reasoning applies here, where one hundred thirty-four claims exist across six patents, and Tesla baldly asserts this all can be represented by two claims. No agreement on representativeness exists, and the Court should deny Tesla's deficient and premature Motion.

B.   The Asserted Patents Claim Eligible Subject Matter

1.   *Alice* Step 1: the claims are directed to eligible subject matter

After distilling over one hundred thirty claims into two, Tesla further abstracts the patents. Tesla posits that the patents are directed to "the abstract idea of performing a task based on matching a current circumstance with a previously learned circumstance." Mot. at 9, 16. By dramatically oversimplifying the inventive concepts, Tesla does exactly what the Federal Circuit has cautioned against: its proposed description of the claims is at too high a level of abstraction and untethered from the language of the claims. *See, e.g.*, *Enfish,* 822 F.3d at 1337 ("[D]escribing

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the claims at such a high level of abstraction and untethered from the language of the claims all but ensures that the exceptions to § 101 swallow the rule."). Indeed, courts in this district have warned against approaches similar to Tesla's and regularly deny motions to dismiss based solely on an erroneous, high-level description of the abstract idea. *See, e.g.*, *APS Tech., Inc. v. Vertex Downhole, Inc.*, C.A. No. 19-1166, 2020 WL 4346700, at *6 (D. Del. July 29, 2020); *Mod Stack LLC v. Aculab, Inc.*, C.A. No. 18-332, 2019 WL 3532185-CFC, at *4 (D. Del. Aug. 2, 2019); *3G Licensing, S.A. v. HTC Corp.*, C.A. No. 17-83-LPS, 2019 WL 2904670, at *2 (D. Del. July 5, 2019) ("While it may be possible that claim 1 could be accurately characterized as directed to some abstract idea, all I need to decide [on a motion to dismiss] is that the claim is not directed to the abstract idea articulated by defendant."). Such is also the case here.

The claims of the Asserted Patents are directed to specific improvements in artificial intelligence (AI), autonomous operations, and/or simulation technology. *See, e.g.*, Compl. at ¶¶39-82. As discussed in the Complaint and specifications, the prior art AI and autonomous systems "lack[ed] a way to learn [the] operation of a device or system and enable autonomous operation of a device or system." *Id.* at ¶43 (citing '974 Patent at 1:26-35). Indeed, Tesla's alleged abstract idea—performing a task based on matching a circumstance with a learned circumstance—at best describes the prior art system disclosed in the prosecution history and Complaint, not the specific technological improvements of the patented inventions. *Id.* at ¶43 (describing the prior art system that was able to "'explore[] its own environment on its own without any learning from a user's instructions" and citing Ex. H (D.I. 1-8) ('974 Patent file history) at 329-330 (pages 14-15 of the Notice of Allowance discussing the advances over the prior art)).

The improvements discussed in the specification and claims of the Object Representation Patents[4] stand in stark contrast to the prior art and Tesla's purported abstract idea. Here, the system/method does teach a way of learning how to operate an autonomous device. The device is operated by a user such that a circumstance detected by the device's sensors can be correlated in a knowledgebase with "instruction sets for operating the [] device … at least partially by [the] user." *See* D.I. 1-2 ('344 Patent) at claim 1. That learned process is then shared with other devices that can autonomously perform operations defined by the instruction set in response to detecting a circumstance that partially matches the one correlated to the instructions in the knowledgebase. *Id.*; *see also id.* at claim 6 (discussing a second device receiving and utilizing the correlated circumstance representation and instruction set from the first device, a concept now known as "fleet learning"[5]); Saber Decl. at ¶¶35-37. This type of fleet learning allows many autonomous devices to iteratively learn how to function based on the user's operations and not be limited to "pre-coded" responses to different circumstances. *See* Compl. at ¶42; Saber Decl. at ¶¶35-37; Mot. at 13-14 (stating the claims are not directed to solving pre-coded responses).

As the first and second devices continue to learn from a user and transmit correlated circumstances and instruction sets back to the "fleet," the autonomous driving of each device gets better and better. Saber Decl. at ¶¶47, 57, 70. The Digital Picture Patents[6] also capture these ideas,

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[4] U.S. Patent Nos. 10,452,974 and 11,238,344.

[5] Tesla takes issue with the fact that the claims are not directed to "vehicles" or "fleet learning." Mot. at 13. Regarding fleet learning, simply failing to recite the magic words "fleet learning" does not mean that this is not what is happening. The claims articulate a first and second device or a first and second avatar receiving circumstances or digital pictures correlated with instruction sets from one another. *See, e.g.*, D.I. 1-2 ('344 Patent) at claim 6; D.I. 1-1 ('974 Patent) at claim 1. Regarding vehicles, an autonomous vehicle is an autonomous device. Further, had Tesla looked at more than a single independent claim, it would be able to see that vehicles are recited in the dependent claims.

[6] U.S. Patent Nos. 11,055,583 and 10,102,449.

but rather than object representations, the learning is done via pictures correlated with learning instructions obtained by monitoring how the user reacts to different moments in time as captured by pictures rather than representations of objects. *See, e.g.*, D.I. 1-6 ('449 patent) at claim 1.

Similarly, for the Simulation Patents,[7] which are directed to specific improvements in simulation technology, Tesla argues without explanation that the difference in the claimed technology "does not change the fact that the claims are directed to the abstract idea of learning to perform a task." Mot. at 15. Again, Tesla's purported abstract idea grossly oversimplifies the inventive concepts disclosed in the patent claims and intrinsic record. This is confirmed by the prosecution history, particularly where the patent examiner opined that prior art "did not teach how it was achieved." Saber Decl. at ¶61 (citing the '134 Patent Notice of Allowance). The Simulation Patents address this failing and teach a learning process for teaching an avatar or object ***how*** to react to different images or circumstances in an application based on detecting how a real human user or a non-human user might react. *See, e.g.*, D.I. 1-4 ('585 Patent) at claim 2. Tesla's purported abstract idea captures none of these specific technical improvements to issues in AI, autonomous technology, and/or simulation technology.

Finally, Tesla argues that Autonomous Devices conflates novelty with subject matter eligibility. This is simply incorrect. Tesla ignores Federal Circuit precedent that instructs that the "claimed advance over the prior art" is an essential inquiry at *Alice* step one. *Koninklijke KPN N.V. v. Gemalto M2M GmbH*, 942 F.3d 1143, 1149 (Fed. Cir. 2019). Here, with each of the patents, Autonomous Devices has reviewed the prior art cited in the prosecution history and put forth an expert declaration discussing known improvements over prior art systems.

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[7] U.S. Patent Nos. 10,607,134 and 11,113,585

For the reasons discussed in detail above, the claimed improvements to AI, autonomous technology, and/or simulation technology render the cases relied upon by Tesla wholly inapposite. For example, the *Personal Web* and *S.I.S.V.E.L* cases involve patent claims that collected, observed, and learned without describing *how* this was done in a manner that improved upon the prior art. Mot. at 12-14. Here, in contrast, the claimed Object Representation Patents are directed to improved "autonomous and artificial intelligence systems" that, unlike the prior art systems, provide "much more precise and appropriate reactions to driving circumstances." Saber Decl. at ¶¶28-31, 48; Compl. at ¶41; D.I. 1-2 ('344 Patent) at 1:39-47. The invention of the claims of the Object Representation Patents achieves this autonomous operation "based on (i) representations of that device's circumstances (which may include one or more object representations) and (ii) representations of circumstances (which may include one or more object representations) and instructions learned from that device or another device." Compl. at ¶50; Saber Decl. at ¶¶45-46. As previously discussed, these can also be transmitted to other devices. This permits a "massive number of scenarios encountered by the fleet [to] be distilled into a set of circumstances (which may include one or more objects) and corresponding instructions that can be efficiently performed autonomously." Compl. at ¶51; Saber Decl. at ¶¶39-48.

The asserted patents in this case thus fall squarely in the camp of Federal Circuit jurisprudence recognizing the eligibility of computer-implemented technological improvements. *See, e.g.*, *Enfish*, 822 F.3d at 1337 (holding that claims were not directed to an abstract idea, explaining that the "claimed invention achieves other benefits over conventional databases, such as increased flexibility, faster search times, and smaller memory requirements"); *Koninklijke KPN*, 942 F.3d at 1149 (software inventions are "patent-eligible where they have made non-abstract improvements to existing technological processes and computer technology").

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The same is true for all of the Asserted Patents. Indeed, the Digital Picture Patents afford autonomous vehicles the ability to detect and handle numerous driving conditions that the prior art lacked. *See generally* Compl. at ¶66; Saber Decl. at ¶¶55-57 (discussing the improvements over the prior art); D.I. 1-16 ('583 Patent File History) at 364-365 (the Notice of Allowance discussing how the prior art fails to disclose learning the correlation between an image and an instruction set). Similarly, the claims of the Autonomous Vehicle Simulation Patents,[8,9] are directed to improved AI, autonomous driving, and/or simulation systems that, unlike the prior art systems, provide "a way to learn operation of an application and/or avatar and enable autonomous operation." Compl. at ¶71 (discussing the semi-autonomous operation of avatars in the prior art); Saber Decl. at ¶¶60-65 (discussing the prior art and prosecution history).

Accordingly, Autonomous Devices has adequately plead that the claims of the Asserted Patents are directed to improvements in AI, autonomous driving, and/or simulation technology.

2. ***Alice* Step 2: as alleged in the Complaint, the claims recite inventive concepts supported by the respective specifications and the expert declaration of Dr. Saber**

Even assuming, *arguendo*, the Asserted Patents are directed to the alleged abstract idea, the claims of the Asserted Patents recite inventive concepts that are supported by the intrinsic record and explained in Dr. Saber's expert declaration. The statements in the declaration and Complaint, accepted as true, mandate the denial of Tesla's motion. *See supra* Section IV.B.

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[8] U.S. Patent Nos. 10,607,134 and 11,113,585.

[9] Tesla takes its generalizations with the Autonomous Vehicle Simulation Patents one-step further. Tesla argues that the analysis at step 1 for the Autonomous Vehicle Simulation Patents is the same as the analysis for the previous patents. Mot. at 15-16. Yet, Tesla does not even address that this subset of patents is directed to improvements in simulation systems as well as AI and autonomous systems as alleged in the Complaint and Dr. Saber's declaration. See Compl. at ¶71 (". . . the "Autonomous Vehicle Simulation Patents. . . are directed to advances in AI, autonomous driving, and simulation technology"); Saber Decl. at ¶¶60-65.

First, looking at **a single claim out of the over one hundred** claims, Tesla suggests that using conventional computer components or well-understood techniques means that the Asserted Patents cannot contain an inventive concept. Mot. at 16 (examining claim 1 of the '449 Patent). Not so. The Federal Circuit has repeatedly recognized the patentability of claims despite their recitation of well-known components. *BASCOM Global Internet Services, ,* 827 F.3d at 1349-50 (holding that "install[ing] a filtering tool at a specific location remote from end users" was an inventive concept despite the tool itself and the hardware components being well known); *Amdocs (Israel) Ltd. v. Openet Telecom, Inc*, 841 F.3d 1288, 1300-01 (Fed. Cir. 2016) (holding that even though "[t]he solution requires arguably generic components" those "generic components operate in an unconventional manner to achieve an improvement in computer functionality.").

Here, Tesla's argument is foreclosed by the well-pleaded allegations in the Complaint. Those well-pleaded allegations explained, among other things, that the claimed inventions were decidedly unconventional as compared to prior art systems, which contained no notion of "autonomous performed operations [] based on a correlation learned in a learning process that includes operating a device at least partially by a user." Compl. at ¶¶44, 56 (prior art systems "lack[ed] a way to learn [the] operation of a device or system and enable autonomous operation of a device or system"), 45-55; Saber Decl. at ¶¶45, 65. These inventive concepts are also reflected in the claims, as discussed above.

Regardless, without claim construction and guidance from the Court as to the scope of the claims, it is not clear that claim elements like the "artificial intelligence unit," "knowledgebase," "knowledge cell," "circumstance representation," "object representations," "learning process that includes operating the first device at least partially by the user," "learning process that includes operating the first device at least partially by another user," "learning process that includes

operating the third device at least partially by: the user, or another user," etc., are indeed generic, well-known components as Tesla suggests. Mot. at 2 (mischaracterizing the claimed learning), 18 (discussing the artificial intelligence unit and knowledgebase), 20 (conflating circumstance and object representations with a picture).[10]

Such claim construction issues preclude a finding of invalidity at the motion to dismiss stage. Ex. 5 (*Trident Holdings, Inc., v. Hubspot, Inc.*, C.A. No. 21-401-CFC, D.I. 24 at 12 (D. Del. Mar. 18, 2022) ("The answer to that question depends on claim construction, and the Court is not prepared to do that at this stage of the case on this briefing")); Ex. 6 (*Kajeet, Inc. v. Gryphon Online Safety, Inc.*, C.A. No. 19-02370-MN, D.I. 36 at 14 (D. Del. Mar. 1, 2021) ("Therefore, at least claim construction appears to be necessary before reaching a conclusion at step two for the '438 Patent")); *see generally* Ex. 7 (*Osteoplastics, LLC v. Zimmer Biomet Holdings, Inc. et al.*, C.A. No. 20-00407-MN, D.I. 39 at 1-4 (D. Del. Oct. 21, 2020) (denying a motion to dismiss where the plaintiff "disputes the representativeness of claim 1 of the '206 Patent and argues that significant claim construction issues bear on the question of patent eligibility under § 101")).[11]

<h4>a.   The Object Representation Patents claim inventive concepts</h4>

Autonomous Devices' Complaint sufficiently alleges that the innovative object representation-based system for training a fleet of autonomous vehicles claimed in the Object Representation Patents was not a well-understood, routine, or conventional improvement to autonomous vehicle systems and should survive at step two. *Aatrix*, 882 F.3d at 1128; Compl. at

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[10] Notably, Tesla's motion does not even mention knowledge cells.

[11] Tesla argues that the "asserted claims—both for the Autonomous Device Patents and the Autonomous Application Patents—are nothing more than an 'attempt to claim the abstract idea of learning to perform a task.'" Mot. at 19-20. Not only is this a blatantly incorrect watering down of the patents' inventive concepts, but this is not the same abstract idea that Tesla spends the first 18 pages of its brief discussing. Regardless, each of the patents claim patentable subject matter because they recite inventive concepts.

¶47; *see also* Saber Decl. at ¶¶39-44. As the Complaint, specification, and Dr. Saber explain:

> Devices or systems commonly operate[d] by receiving a user's operating directions in various circumstances. Instructions [were] then executed to effect the operation of a device or system based on [the] user's operating directions. Hence, devices or systems rel[ied] on the user to direct their behaviors. Commonly employed device or system operating techniques lack[ed] a way to learn [the] operation of a device or system and enable autonomous operation of a device or system.

Compl. at ¶41 (internal citations omitted); *see also* D.I. 1-2 ('344 Patent) at 1:39-47; Saber Decl. at ¶¶28-31. The Complaint and Dr. Saber's declaration then provide pages of examples regarding how the Object Representation Patents were not well-understood, routine, or conventional improvements to the prior art. For example, as pleaded in the Complaint, the inventions were decidedly unconventional as compared to prior art systems, which had no "concept of causing a device to perform autonomous operation based on (i) representations of that device's circumstances (which may include one or more object representations) and (ii) representations of circumstances (which may include one or more object representations) and instructions learned from that device or another device…." *See* Compl. at ¶50; Saber Decl. at ¶¶41-48. These inventive concepts are reflected in the claims. *See* Compl. at ¶¶51-52; Saber Decl. at ¶¶41-48. Thus, contrary to Tesla's contention that Dr. Saber's declaration contains "conclusory assertions," Dr. Saber provides concrete examples of how the patents disclose non-routine and unconventional solutions to pre-existing technological problems. Mot. at 19.

b. The Digital Picture Patents claim inventive concepts

Autonomous Devices' Complaint sufficiently alleges that the innovative digital picture-based system for training a fleet of autonomous vehicles claimed in the Digital Picture Patents was not a well-understood, routine, or conventional improvement to autonomous vehicle systems and should survive at step two. *Aatrix*, 882 F.3d at 1128; Compl. at ¶62; *see also* Saber Decl. at ¶¶50-55. As the Complaint, specification, and Dr. Saber explain:

[Prior art] devices or systems [were] limited to relying on the user to direct them. Ex. F ('449 Patent) at 1:20-23; *see also* Ex. E ('583 Patent) at 1:31-39 ("These systems and/or devices depend on user's input to various degrees for their operation. A machine learning solution [was] needed for computing enabled systems and/or devices to be less dependent on or fully independent from user input.")

Compl. at ¶56; *see also* Saber Decl. at ¶¶30-32. The Complaint and Dr. Saber's declaration provide pages of examples regarding *how* the Digital Picture Patents were not well-understood, routine, or conventional improvements to the prior art. For example, as pleaded in the Complaint, the inventions were decidedly unconventional as compared to prior art systems, in which there was no "concept of causing a device to perform autonomous operation based on (i) digital pictures captured by a device and (ii) digital pictures and instructions learned from that device or another device." *See* Compl. at ¶65; Saber Decl. at ¶¶55-56. These inventive concepts are also reflected in the claims. *See* Compl. at ¶65; Saber Decl. at ¶¶51-54.

> c.   **The Autonomous Vehicle Simulation Patents claim inventive concepts**

Autonomous Devices' Complaint sufficiently alleges that the innovative simulation system for training a fleet of autonomous vehicles claimed in the Autonomous Vehicle Simulation Patents was not a well-understood, routine, or conventional improvement to autonomous vehicle systems. *Aatrix*, 882 F.3d at 1128; Compl. at ¶¶71-78; *see also* Saber Decl. at ¶¶60-72. As the Complaint states:

"Applications and/or avatars thereof commonly operate by receiving a user's operating directions in various circumstances. Instructions are then executed to effect the operation of an application and/or avatar based on user's operating directions. Hence, applications and/or avatars rely on the user to direct their behaviors.

Compl. at ¶71. In contrast, prior art systems "[c]ommonly employed application and/or avatar operating techniques lack a way to learn operation of an application and/or avatar and enable autonomous operation of an application and/or avatar." D.I. 1-3 ('134 Patent) at 1:26-35; D.I. 1-4

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('585 Patent) at 1:45-55; Saber Decl. at ¶61. The Autonomous Vehicle Simulation Patents provide solutions to these exact problems, and the Complaint and Dr. Saber's declaration provide pages of examples regarding how these patents were not well-understood, routine, or conventional improvements to the prior art. Compl. at ¶¶71-78; *see also* Saber Decl. at ¶¶60-72.

For example, the Complaint explains that prior art systems contained no notion of using a simulation to teach an AI or autonomous system based on the concepts taught by real-world pictures and object representations. Prior to the inventions, there were still inhibiting limitations such as scale and uniqueness existing. Compl. at ¶80; Saber Decl. at ¶70. Indeed, "by allowing the entire fleet to train the system, as discussed earlier, and allowing simulation of driving operations and situations, much more precise and appropriate autonomous driving became possible." Saber Decl. at ¶70. Thus, these simulations dramatically improve safety before the software is released to physical vehicles because the simulations allow for copious testing and data collection putting real drivers at risk. This promotes not only safer testing but safer software that is eventually released to vehicles. Compl. at ¶80. In fact, this is just one of several inventive concepts alleged by Autonomous Devices. *See, e.g.*, Compl. at ¶80 (discussing how "the prior art does not teach the details of object representations, avatars, determining instruction sets, and causing an avatar to perform operations as recited in the claims."). Finally, these inventive concepts are yet again reflected in the claims. *See* Compl. at ¶79.

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Tesla does not seriously address any of Autonomous Devices' well-pleaded allegations concerning the nature of the claims. Because Tesla has not addressed these allegations, they must be accepted as true, Autonomous Devices has adequately pleaded that the patents claim eligible subject matter.

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VI.   CONCLUSION

For the reasons set forth above, the Motion should be denied.

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